

432512/19/05

Revised

CITY OF RIVERSIDE
HUMAN RESOURCES DEPARTMENT
CLASSIFICATION SPECIFICATION

TITLE: UTILITIES SENIOR WATER CONTROL SYSTEMS TECHNICIAN

DEFINITION

Under general supervision, to perform skilled and supervisory work in the design, installation, maintenance and repair of the automated water control system; to prepare plans, schematics, wiring diagrams and technical specifications for the purchase and installation of electronic, electro-mechanical, hydraulic and pneumatic control equipment; to supervise and participate in the programming, operation, testing and adjustment of control equipment and on-line mini-computer; and to do related work as required.

REPORTS TO: Utilities Water Operations Manager

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from the Utilities Water Operations Manager. Exercises general supervision over para-professional, technical and administrative support staff as assigned.

EXAMPLES OF DUTIES

Typical duties may include, but are not limited to, the following:

- Research publications and industry sources on automated control systems.
- Develop plans and technical specifications for the purchase of electronic, electro-mechanical, hydraulic and pneumatic control equipment.
- Prepare schematic and wiring diagrams for the automatic control of pumps and valves.
- Make cost estimates and prepare work orders and requisitions for purchase of materials.
- Prepare budgets and justifications for automated control system improvement.
- Work with telephone company personnel to add, modify and troubleshoot telemetry circuits.
- Assist in the inspection testing and initial start-up of control and telemetering systems.
- Make tests of adjustments to recording equipment and telemetering circuits.
- Initiate change orders for control system force account and contract work.
- Supervise and participate in the repair and replacement of control equipment, including electrical metering and switch-gear motors and pumps.
- Make additions and changes to existing on-line mini-computer programs, including set points, logging reports and control sub-routines.
- Keep system records and prepare reports as required.
- Coordinate construction and installation of contract work for control systems.
- Supervise, train and evaluate subordinate technical personnel.

QUALIFICATIONS

Knowledge of:

- Theory and practice of control systems using electronic, pneumatic, hydraulic and electro-mechanical equipment and mini-computers.
- Methods, tools and equipment used in installing, testing and repair of control systems.
- Telephone and radio transmission systems as they relate to telemetering.
- Computer programming as it relates to on-line control systems.
- Principles of supervision, training, and performance evaluation.

Ability to:

- Prepare plans, estimates and specifications.
- Prepare schematics and wiring diagrams.
- Communicate clearly and concisely, orally and in writing.
- Work under emergency conditions, day or night, and be willing to work when called anytime during a 24-hour period.
- Supervise, train, and evaluate subordinate-technical personnel.

Education and Experience:

Any combination of experience and education that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Education: Equivalent to an Associate Arts degree with major course work in electronics, mathematics and computer programming.

Experience: Three years' experience in electronic telephone circuitry and radio systems related to telemetry, including experience in the design and operation of control systems and computer programming related to data-logging and automatic control.

MEDICAL CATEGORY: Group 1

NECESSARY SPECIAL REQUIREMENT

Possession of an appropriate, valid class "C" California Motor Vehicle Operator's License.

Possession of, or ability to obtain within six months a valid Water Distribution Certificate of the appropriate grade issued by AWWA and/or a Water Treatment Facility Operator's Certificate of the appropriate grade issued by the California State Department of Public Health as required by area of assignment.

CAREER ADVANCEMENT OPPORTUNITIES

FROM: Utilities Senior Water Control Systems Technician

TO: Utilities Water Operations Manager